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Preliminary Amendment Accompanying RCE

AMENDMENTS TO THE SPECIFICATION

Please amend the second full paragraph on page 5 as follows:

Referring to FIGS. 1, 2 and 3 in particular, the anterior cervical plate system 10 is shown in combination with bone screws 20. Each of the plate 12 tapered holes 13 receive a bone screw. Bone screws 20 each include a head 23, a threaded portion of the shank 21 and a tapered shank portion 25, between the head 23 and the threads. The tapered section has a minor diameter that equals or exceeds the major diameter of the threads of shank 21. These diameters allow the bone screws 20 to be inserted, shank first, into any of the screw holes 13 from the anterior side 11 of plate 12, with the threaded shank 21 passing through the hole 13 of the posterior surface. The thread engages a predrilled and pre-threaded hole 33 in the vertebra or the graft 30. The bone screw maintains the plate 12 in contact with the vertebrae 31 and 32. The screw's tapered portion 25 is pulled into the matching tapered hole 13 locking the screw 20 to the plate 12. The taper is configured to be self-locking preventing the screw from backing out. The taper is of sufficient length to extend into the vertebral bone. The taper will compress the bone hole resulting in increased strength of the bone-screw interface. The screws may be fixed to the plate and bone holes with adhesive, cement, or other bonding materials. For additional holding strength, an adhesive may be coated on the screw to plate interface and the screw to bone surfaces. To date, the only adhesives which have the properties necessary for implants, are the cyanoacrylates. Some of the advantages of evanoacrylate adhesives include: simple to apply, fast setup and cure, nontoxic, biocompatible, require little pre-operative preparation, are long lasting, and moisture tolerant. Ethicon Dermabond® is approved for medical use.

Please amend the first full paragraph on page 7 as follows:

After the disc is removed the graft 30, as shown in Figs. 1 and 2, is forced into position at the center of the vertebral end plates 31 and 32. Replacing damaged discs with rigid grafts is well known to those practiced in the art. The method of stabilizing the graft and maintaining the relationship between the two vertebrae is still a changing

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technology. The plate is selected and placed on the patient's vertebra 31 and 32. A portion of the vertebral protrusions 28 may be removed for a proper fit. The screws may be fixed to the plate and bone holes with adhesive, cement, or other bonding materials.

For additional holding strength an adhesive may be coated on the screw to plate interface and the screw to bone surfaces. The remainder of the method is presented as three procedures listed below.